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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/614,325 | 07/07/2003 | Peter R. Voorheis | B02-31 | 7363 |

7590

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| EXAMINER |
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BUTTNER, DAVID J

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| ART UNIT | PAPER NUMBER |
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1712

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,325

Applicant(s)

VOORHEIS, PETER R.

Examiner

David Buttner

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1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-8,10-26 and 28-33 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The "carbon-carbon" initiator limitation is unclear in the absence of a clear structure or definition. It appears applicant intends to exclude peroxide initiators (page 9 line 18). However, peroxides do have carbon to carbon bonds. In the interest of clarity, the claims should either explicitly recite the specification's definition or recite a structure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14,16,17,22-27 and 30-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Dalton 2002/0006837 in view of Aoki '763 or Amtmann '080.

Dalton suggests urethane covered multilayer golf balls (abstract). There can be a hard inner cover and a soft outer cover (paragraph 185). The core can be at least 1.58" (paragraph 48). The core is made of polybutadiene of 45-60 Mooney (paragraph 88). A free radical source (typically a peroxide) is used to facilitate cure. (paragraph 106). Dalton does not suggest the class of free radical initiators claimed by applicant.

Such free radical initiators are known for curing polybutadiene (see Aoki's table). These initiators are superior to peroxides in the resulting bending strength, bending

modulus, heat distortion (see Aoki's table) and crosslinking amount (col 1 line 48-52 of Aoki). Furthermore, these initiators do not suffer from the odors etc of peroxides (col 1 line 45-49 of Amtmann). It would have been obvious to choose Aoki's initiator in place of Dalton's peroxides for the expected improvements.

Claims 1-13,16,17,21-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi '692 in view of Aoki '763 or Amtmann '080.

Higuchi exemplifies cores for urethane covered golf balls (table 1). The cores contain polybutadiene, zinc diacrylate peroxide pentachlorothiophenol etc. Higuchi does not suggest the class of free radical initiators claimed by applicant.

Such free radical initiators are known for curing polybutadiene (see Aoki's table). These initiators are superior to peroxides in the resulting bending strength, bending modulus, heat distortion (see Aoki's table) and crosslinking amount (col 1 line 48-52 of Aoki). Furthermore, these initiators do not suffer from the odors etc of peroxides (col 1 line 45-49 of Amtmann). It would have been obvious to choose Aoki's initiator in place of Higuchi's peroxides for the expected improvements.

Claims 1-13,16,17,22-27 and 30-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '403 in view of Aoki '763 or Amtmann '080.

Sullivan (abstract) suggests golf balls having a dual core and a dual cover. The inner cover is hard while the outer cover is hard (col 8 line 46).The outer cover can be a urethane (abstract). One of the core layers is based on polybutadiene/zndiacrylate/peroxide (table 14). Sullivan names peroxides as suitable free radical initiators (col 30 line 33), but doesn't mention applicant's class of initiators.

Such free radical initiators are known for curing polybutadiene (see Aoki's table). These initiators are superior to peroxides in the resulting bending strength, bending modulus, heat distortion (see Aoki's table) and crosslinking amount (col 1 line 48-52 of Aoki). Furthermore, these initiators do not suffer from the odors etc of peroxides (col 1 line 45-49 of Amtmann). It would have been obvious to choose Aoki's initiator in place of Sullivan's peroxides for the expected improvements.

Claims 1-13,15,25-27 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison '721 in view of Aoki '763 or Amtmann '080.

Harrison suggests multilayer golf balls (abstract). The core is a blend of polybutadiene and a thermoplastic (example 1). A peroxide is used to cure the composition (col 4 line 25). Harrison does not suggest applicant's class of initiators.

Such free radical initiators are known for curing polybutadiene (see Aoki's table). These initiators are superior to peroxides in the resulting bending strength, bending modulus, heat distortion (see Aoki's table) and crosslinking amount (col 1 line 48-52 of Aoki). Furthermore, these initiators do not suffer from the odors etc of peroxides (col 1 line 45-49 of Amtmann). It would have been obvious to choose Aoki's initiator in place of Harrison's peroxides for the expected improvements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

12/29/04

DAVID J. BUTTNER
PRIMARY EXAMINER

